U.S. Fish & Wildlife Service
Sacramento Fish & Wildlife Office
Species Account
SLENDER ORCUTT GRASS
Orcuttia tenuis

CLASSIFICATION: THREATENED
Federal Register Notice 58:14338; March 26, 1997
http://ecos.fws.gov/docs/federal_register/fr3057.pdf (125 KB)

Slender Orcutt Grass
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STATE LISTING STATUS AND CNPS CODE:
This species was listed as endangered by the California Department of Fish and Game. The California Native Plant Society has placed it on List 1B (rare or endangered throughout its range).

CRITICAL HABITAT: Originally designated in Federal Register 68:46683; August 6, 2003.

The designation was revised in 70:46923; August 11, 2005.

Species by unit designations were published in 71:7117; February 10, 2006.
www.fws.gov/policy/library/2006/06-1080.html
www.fws.gov/policy/library/2006/06-1080.pdf (6.6 MB)

RECOVERY PLAN: Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon; December 15, 2005.
http://www.fws.gov/sacramento/es/recovery_plans/vp_recovery_plan_links.htm

5-YEAR REVIEW: Completed November 2009. No change recommended.
https://ecos.fws.gov/docs/five_year_review/doc3226.pdf (3.4 MB)

Slender Orcutt Grass
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DESCRIPTION:
Slender Orcutt grass is a small, weakly tufted annual in the grass family (Poaceae). Slender Orcutt grass and the endangered hairy Orcutt grass (*O. pilosa*) grow together over a portion of their respective ranges but are readily distinguished.

Slender Orcutt grass has fairly slender stems that often branch from their upper nodes. Spikelets are evenly spaced, not densely crowded. Hairy Orcutt grass stems branch only from lower nodes. Upper spikelets are densely crowded. As the species' name implies, it has more hairs. (See Orcuttieae Grasses below for more information.)

The plant grows as single stems or in small tufts consisting of a few stems 5 to 20 centimeters (2.0 to 7.9 inches) inches long, ending in an elongate inflorescence of scattered spikelets. The Stems are sparsely hairy and branch only from the upper half of the stem. Although the stems typically are erect, they may become decumbent if many branches form near the stem tip. The lemmas (bracts) are deeply cleft into fine, equal-length, prominent teeth that are sharp-pointed or short-awned. Foliage is grayish, with sparse hairs.

The terrestrial leaves are 1.5 to 2 millimeters (0.06 to 0.08 inch) wide. In *O. tenuis*, the inflorescence comprises more than half of the plant's height, and the spikelets are more or less evenly spaced throughout the inflorescence. Each spikelet contains from 5 to 20 florets.

See Hickman (1993) in General Information about California Plants below for more details.

VERNAL POOLS:

Vernal pools are a unique kind of wetland ecosystem. Central to their distinctive ecology is their ephemeral nature. Vernal pools fill with water temporarily, typically during the winter and spring, and then disappear until the next rainy season.

In California, where extensive areas of vernal pool habitat developed over a long geological timeframe, unique suites of plants and animals have evolved that are specially adapted to the unusual conditions of vernal pools. Fish and other predators are among species that have been excluded evolutionarily byte annual filling and drying cycles of vernal pools.

The prolonged annual dry phase of the vernal pool ecosystem also has prevented the establishment of plant species typical of more permanent wetland ecosystems. .

ORCUTTIEAE GRASSES:

The genera *Orcuttia*, *Neostapfia* and *Tuctoria* form the Orcuttieae tribe. All members of the Orcuttieae tribe share several characteristics that differ from many other grasses. Most grasses have hollow stems, but the Orcuttieae have stems filled with pith (the soft, spongy center found in many plants). Another difference is that the Orcuttieae produce two or three different types of leaves during their life cycle, whereas most grasses have a single leaf type throughout their life span.

The juvenile leaves of the Orcuttieae, which form underwater, are cylindrical and clustered into a basal rosette. After the pool dries, terrestrial leaves form in all species of the tribe. These leaves have flattened blades and are distributed along the stem.

Another characteristic common to all Orcuttieae is the production of an aromatic exudate, which changes from clear to brown during the growing season. The exudate most likely helps to repel herbivores

Orcuttia species have a third type of leaf that is not found in *Neostapfia* or *Tuctoria*. The terrestrial leaves of the Orcuttieae also differ from other grasses in other respects. Whereas grass leaves typically are differentiated into a narrow, tubular sheath that clasps the stem tightly and a broader blade that projects away from the stem, terrestrial leaves of the Orcuttieae are broad throughout and the lower portion enfolds the stem only loosely.

DISTRIBUTION:

Slender Orcutt grass occurs in valley grassland and blue oak woodland. It grows in vernal pools on remnant alluvial fans and high stream terraces and recent basalt flows. It has some ability to colonize artificial habitats, such as the margins of stock ponds.

The primary area of concentration is in the vicinity of Dales, Tehama County. A secondary area of concentration is the Modoc Plateau Vernal Pool Region in Lassen, Plumas, Shasta and Siskiyou Counties. There are a few occurrences in the Lake-Napa and Southeastern Sacramento Valley Vernal Pool Regions.

U.S. Geological Survey 7.5 Minute Quads: Elk Grove (496A) 3812143, Buffalo Creek (511C) 3812152, Middletown (533D) 3812275, Kelseyville (534A) 3812287, Palermo (560A) 3912145, Richardson Springs NW (593B) 3912188, Vina (594A) 3912281, Almanor (606B) 4012122, Swain Mountain (624A) 4012141, Tuscan Buttes NE (628A) 4012241, Balls Ferry (628B) 4012242, Bend (628C) 4012232, Dales (628D) 4012231, Cottonwood (629A) 4012243, Harvey Mountain (642A) 4012161, Poison Lake (642B) 4012162, Swains Hole (643A) 4012163, Old Station (643B) 4012164, West Prospect Peak (643C) 4012154, Palo Cedro (646C) 4012252, Enterprise (647D) 4012253, Murken Bench (661C) 4012174, Burney (662B) 4012186, Day (678A) 4112123, Timbered Crater (678B) 4112124, Dana (679D) 4112115, Washington Mountain (693B) 4112048, Happy Camp Mountain (694A) 4112141, Crank Mountain (694B) 4112142, Donica Mountain (694C) 4112132, Boles Meadows West (710B) 4112068, Ambrose (710C) 4112058, Spaulding Butte (711C) 4112152, Knobcone Butte (711D) 4112151.

THREATS:

A number of specific threats are continuing for this species. In particular, urbanization is a continuing threat to *Orcuttia tenuis* populations in the vicinity of Redding and Sacramento. Off-road vehicle use is a particular problem near Redding and in forested areas of the Modoc Plateau.

Despite the comparatively wide range of the species, small population size is of concern in the Lake-Napa Vernal Pool Region and the Millville Plains-Stillwater Plains area of the Northeastern and Northwestern Sacramento Valley Vernal Pool Regions.

REFERENCES FOR ADDITIONAL INFORMATION:

General references about California plants
www.fws.gov/sacramento/es/plant_spp_accts/plant_references.htm

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